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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,395

07/03/2003

Shane S. Taylor

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EXAMINER

SCHNEIDER, CRAIG M

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/614,395	Applicant(s) TAYLOR ET AL.	
	Examiner CRAIG M. SCHNEIDER	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66 and 68-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66 and 68-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on 3/25/08. These drawings are not acceptable.
2. The drawings are objected to because the numbering of the items is unclear.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 226 in Figures 1 and 2, 57 in Fig. 13. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The amendments to the specification dated 3/25/08 are not entered because the amendments to the specification refer to paragraph numbers that do not match those used in the specification as originally filed. For example, applicant proposes on page 4 entry of an amendment to "paragraph [0064]" recites "[0066] ...". The resulting

specification, with these amendments entered would thus include two each of paragraphs [0066], [0068], [0075], and [0100]. Accordingly it is respectfully suggested that applicant resubmit this amendment with appropriate paragraph numbers.

5. The disclosure is objected to because of the following informalities:

Page 7, para. 38 "FIGURE 11" should be --FIGURE 12--.

Page 13, para. 64, line 3 in two places "barrier 122" should be --barrier 124--.

Page 14, para. 66, last line "downstream if the" should be --downstream of the--.

Page 16, para. 73, line 6 "of the upstream end 159" should be --of the outside surface 159--.

Page 23, para. 98, line 8 "The also" should be --The method also--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 66 and 68-70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 66 recites the limitation "the gas outlet" in line 23. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 66 recites the limitation "the first stage regulator" in line 24. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 66, 68, and 70 are rejected as understood under 35 U.S.C. 103(a) as being unpatentable over Contreras (4,015,630) in view of Schuler (5,685,297) and in further view of Dey (3,426,790).

Contreras discloses a regulator device configured to reduce the gas pressure of a source of pressurized breathable gas in a self contained underwater breathing apparatus comprising a regulator housing (10); a gas inlet opening (11 where 16 branches off) located within a bore in the regulator housing; a gas valve comprising a housing possessing an inlet opening (area that 11 is pointing to in Figure 1) and an exit opening (area that is right before the gas inlet opening); a passageway (area after 11 and right before the branch leading to 16) extending downstream of the inlet opening, a moveable cover member (12a) adapted to cover the inlet opening of the gas valve, the moveable cover member having a range of motion between a first position wherein the moveable cover member covers the inlet opening and a second position outside of the passageway wherein the moveable cover member is displaced from the inlet opening as seen in Figure 1, the moveable cover member being biased towards the first position (12 and 13 screws the cover into place therefore it is biased into the first position); and the gas outlet opening of the gas valve is in fluid communication with the gas inlet opening of the first stage regulator (col. 2, lines 4-21). Contreras fails to disclose a filter located within the passageway so that fluid must pass through the filter to pass through the exit opening, a retainer for removably securing the filter within the exit opening of

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the passageway, and the housing of the gas valve includes a portion threaded into the bore of the regulator housing. Schuler discloses a gas valve (the device that encloses 20 and that is threaded into housing 12) comprising a housing possessing an inlet opening (area below 20 away from 12) and an exit opening (area that the gas valve enters 12); a passageway (the passage through the gas valve) extending downstream of the inlet opening and a filter (20) located within the passageway so that fluid must pass through the filter to pass through the exit opening, and the housing of the gas valve includes a portion threaded (area that the gas valve meets 12) into the bore of the regulator housing (col. 3, lines 43-50). Schuler fails to disclose that a retainer for removably securing the filter within the exit opening of the passageway is used. Dey discloses a retainer (32) for removably securing the filter within the exit opening of the passageway (col. 2, lines 56-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a removable gas valve as disclosed by Schuler with the device of Contreras, in order to easily replace the gas valve.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a removable retainer with the filter as disclosed by Dey with the filter of Contreras as modified by Schuler, in order to be able to replace the filter as needed.

12. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Contreras in view of Schuler and Dey as applied to claim 66 above, and further in view of Hershman (2,725,072).

Contreras in view of Schuler and Dey discloses all the features of the claimed invention except wherein the moveable cover member is adapted to automatically move from the second position to the first position when the valve is disconnected from a source of compressed gas. Hershman discloses the use of spring (41) assisted closing devices (40) to cover up a passageway (23)(col. 2, line 20 to col. 3, line 47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the idea of a spring assisted closing device as disclosed by Hershman in place of the closing device of Contreras in view of Schuler and Dey, to have a closing device that is closed when not in use.

Response to Arguments

13. Applicant's arguments with respect to claims 66 and 68-70 have been considered but are moot in view of the new ground(s) of rejection. The applicant argues the point that the moveable cover member of the Contreras device was not biased towards the first position. The examiner has clarified the rejection to indicate that items 12 and 13 of Contreras would bias the cover member to the first position. Further the Hershman reference would further read on the claim language if necessary.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRAIG M. SCHNEIDER whose telephone number is (571)272-3607. The examiner can normally be reached on M-F 8:30 -5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. M. S./
Examiner, Art Unit 3753
May 28, 2008

/John Rivell/
Primary Examiner, Art Unit 3753